

**Compensatory mitigation** is not normally considered until anticipated impacts to waters of the United States have been avoided or minimized to the maximum extent possible. It is recognized that "no net loss of wetlands" functions and values may not be achieved in each and every permit action. Appropriate and practicable compensatory mitigation is required for unavoidable adverse impacts that remain after all appropriate and practicable minimization has been completed. Compensatory actions often include restoration, creation, and enhancement of Waters of the United States. Such action should be undertaken in areas adjacent to the discharge site when feasible.

Opportunities for on-site mitigation were investigated within the project vicinity. Soil survey data (Shaffer 1994) and aerial photography were used to determine specific sites for field investigation. Field investigations resulted in a surprisingly low potential for on-site mitigation. Many of the streams that are mapped within agricultural fields, pastures, and cutovers are intermittent or ephemeral channels. The majority of perennial streams within the project study area exist in mature bottomland hardwood systems or other areas that are already forested. Vegetation surrounding the perennial streams protects the banks and creates a fairly stable stream system in most cases. There are also very few areas mapped as hydric A soils that are not currently forested, and in most cases considered existing wetlands.

There are four potential on-site mitigation opportunities, consisting of riverine wetland mitigation along with small amounts of stream mitigation, adjacent to the project study area.

The first opportunity exists along the headwaters of Wildcat Swamp. This area is located east of US 158 south of its intersection with Wildcat Swamp (SA25). The land is currently in active cattle pasture. An unnamed tributary, which starts as the discharge from Pond P8, was dry during site visits in May 2006 and determined to be an ephemeral channel. Therefore, stream mitigation is not an option at this site. However, the soils surrounding the unnamed tributary are mapped as Hydric B soils. There are two existing ponds along the tributary, one near its headwaters (P8) and one just before its confluence with Wildcat Swamp (outside the project study area). Cattle have unrestricted access to both ponds as well as to the ephemeral channel that connects them. Low to moderate potential for approximately 2 to 3 acres of headwater wetland restoration/creation exists along this tributary. The cattle need to be restricted from this drainage feature. The ponds and the land surrounding them could be drained, graded, and planted with native vegetation to reestablish what appears to have once been a headwater wetland system draining into Wildcat Swamp. The ephemeral channel that connects the two ponds could also be planted and possibly graded into a wetland swale.

Another on-site mitigation opportunity exists along an unnamed tributary to Gumberry Swamp. This site is located just south of SR 1311 (Jackson Bypass Road) approximately 0.5 mile east of its intersection with Gumberry Swamp. This tributary begins in the project study area, in an agricultural field, as a linear manmade wetland (WA28). Approximately 500 feet south of the project study area, this manmade wetland transitions into a channelized stream. The stream flows into a large beaver swamp, which eventually drains into Gumberry Swamp. The stream was determined to be perennial at the time of the site visit in May 2006. There was water in the channel, persistent bed and banks, low to moderate flow, and a relic floodplain.